



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,516	09/01/2000	Louise Farrand	MERCK-2155	6056

23599 7590 08/30/2005

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
2200 CLARENDON BLVD.
SUITE 1400
ARLINGTON, VA 22201

EXAMINER

OH, TAYLOR V

ART UNIT	PAPER NUMBER
----------	--------------

1625

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/654,516

Applicant(s)

FARRAND ET AL.

Examiner

Taylor Victor Oh

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1625

It is noted that applicants have filed an Appeal Brief after the Final Rejection on 5/12/05; as a result of the appeal conference, the examiner has withdrawn the previous Office Action and reopened the prosecution of the application.

The Status of Claims

Claims 1-10, and 17-20 are pending.

Claims 1-10, and 17-20 have been rejected.

DETAILED ACTION

1. Claims 1-10, and 17-20 have been under consideration.

Priority

2. It is noted that the application has filed a foreign priority document of EPO 99116849.3 (09/03/1999).

Drawings

3. None.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-10, and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase "R² is straight-chain or branched alkyl with 1 to 25 C atoms" is recited. The expression is vague and indefinite because, in order for the alkyl compound to have the branched alkyl, R² has to have at least the minimum of three carbon atoms from the beginning, not with 1 or 2 carbon atoms. Therefore, an appropriate correction is required.

In claims 7 and 8, the phrase "alkyl is straight or branched alkylene with 1 to 12 C atoms" is recited. The expression is vague and indefinite because, in order for the alkyl compound to have the branched alkylene, alkyl has to have at least the minimum of three carbon atoms from the beginning, not with 1 or 2 carbon atoms. Furthermore, the term "alkylene" would mean that the starting carbon atoms requires at least two carbon atoms with the double bond between them because the alkylene can not be formed with the only 1 C atom. Therefore, an appropriate correction is required.

In claim 19, the phrase "Sp is straight or branched alkylene with 1 to 12 C atoms" is recited. The expression is vague and indefinite because, in order for the alkyl compound to have the branched alkylene, Sp has to have at least the minimum of three carbon atoms from the beginning, not with 1 or 2 carbon atoms. Furthermore, the term "alkylene" would mean that the starting

Art Unit: 1625

carbon atoms requires at least two carbon atoms with the double bond between them because the alkylene can not be formed with the only 1 C atom.

Therefore, an appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

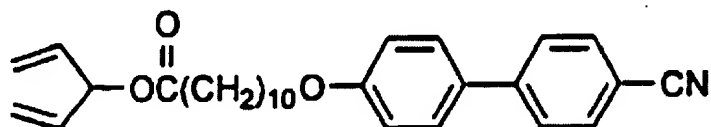
Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4, 6, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated clearly Hall et al (WO 97/16504)

Hall et al discloses a liquid crystal polymer as shown below (see page 23, compound #2):

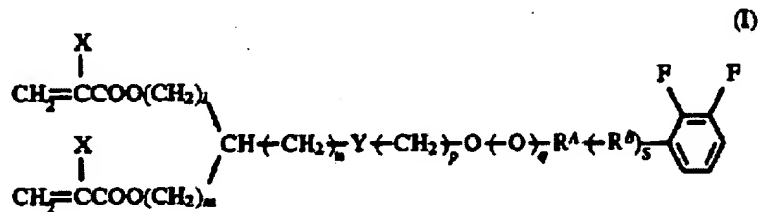


This is identical with the claims.

Art Unit: 1625

5. Claims 1-2, 4-6, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated clearly Onishi et al (US 5,750,213).

Onishi et al discloses the polymerizable compound represented by formula (I) :



where X is a hydrogen atom or a methyl group; l and m are independently an integer of 0 to 14; Y is a single bond, —COO—, —OCO—, or —O—; n and p are independently an integer of 0 to 18; q and s are independently an integer of 0 or 1; and R^A and R^B are independently represented by Formula (II) or (III);



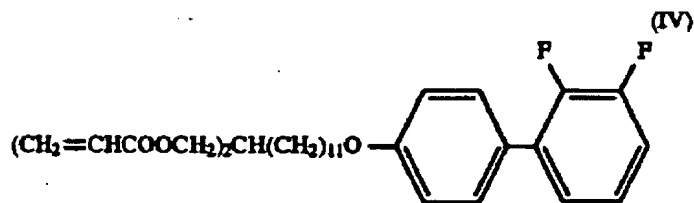
(II)



(III)

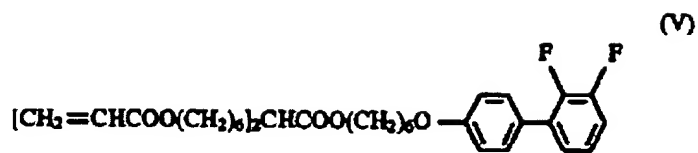
provided that, when q=1, p≥2; and when R^A is represented by the Formula (II), R^B is represented by the Formula (II).

Furthermore, the following compounds are the examples of the above formula:

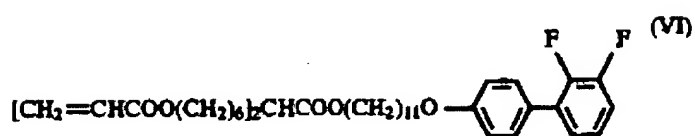


(see col. 26, line 30),

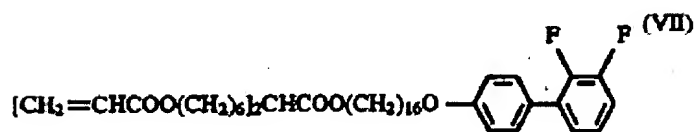
Art Unit: 1625



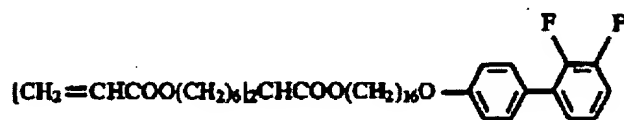
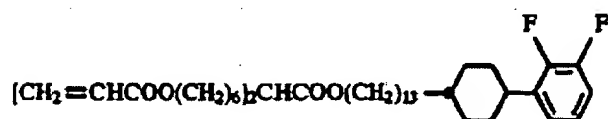
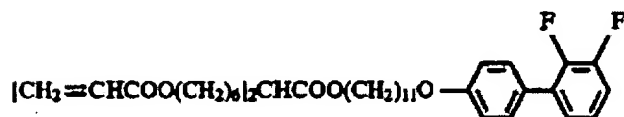
(see col. 26, line 63)



(see col. 31, line 5)

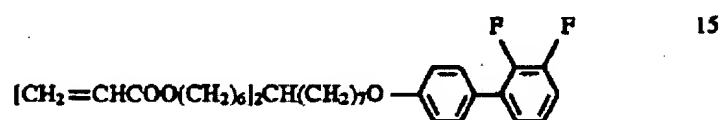
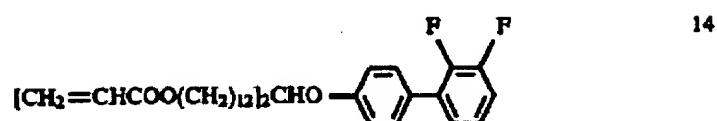
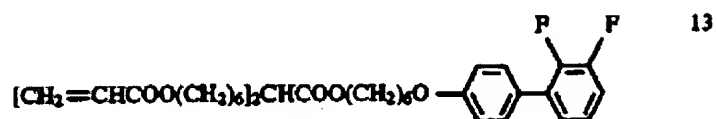
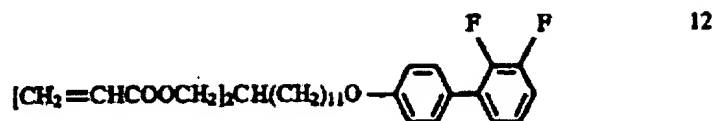


(see col. 31, line 35)



(see col. 46, table 4)

Art Unit: 1625



They are identical with the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/25/15